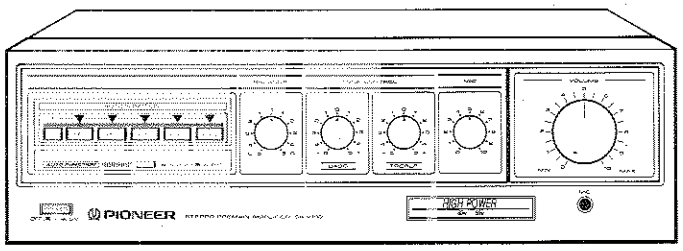
PIONEER®
The future of sound and vision.

SA-V190

Operating Instructions
Mode d'emploi
Bedienungsanleitung
Istruzioni per l'uso
Manual de instrucciones

STEREO PREMAIN AMPLIFIER
PREAMPLI PRINCIPAL STEREO
STEREO VOR-HAUPTVERSTÄRKER
PREAMPLIFICATORE STEREO
PREAMPLIFICADOR PRINCIPAL ESTÉREO



English

Français

Deutsch

Italiano

Español

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

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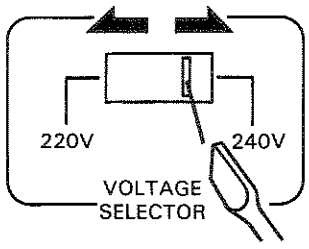
LINE VOLTAGE SELECTOR SWITCH

You will find the line voltage selector switch on the rear panel. Before your model is shipped from the factory, the switch is set to the power requirements of the destination;
nevertheless, you should check that it is set properly before plugging the power cord into the wall outlet. It the voltage requirments differ, adjust the selector switches as follows.
Before adjusting, disconnect the power cord.

1. Provide yourself with a medium-size screwdriver.
2. Changing the position of switch.
   Insert screwdriver into the slot on the voltage selector and adjust so that the tip of the slot points to the value of your area.



PRIOR TO CONNECTION

NOTES ON CONNECTION

- Turn the power switches of the SA-V190 and the components on after completion of connection of the entire system.
- Regarding the input and output terminals of the SA-V190, "L" refers to the left channel and "R" refers to the right channel. Be sure not to confuse these channels when connecting the cables.
- Fully insert the connection cable pin plugs. Incomplete insertion may cause noise instead of sound.

Speaker Impedance

- Use the speakers with the nominal impedance of 4 ohm to 16 ohm when connecting to speaker terminal system A or B only. Use those with the nominal impedance of 6 ohm to 32 ohm when connecting to both systems A and B.

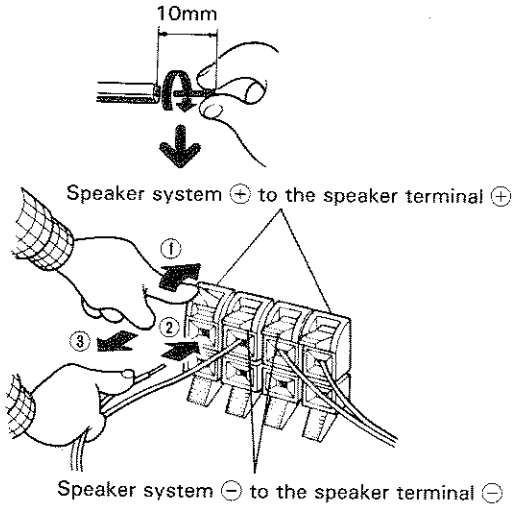
Power Consumption of the Power Outlet

- Be sure not to connect electric appliances, such as a toaster or a dryer, whose power consumption exceeds the watt value displayed on the panel. Connection of these electric appliances may cause defects or fire.
- Do not connect a television set, although its power consumption is less than the permissible value for the SA-V190. When the power switch of the television set is turned on, a large amount of current flows, resulting in a current exceeding the permissible value.

HOW TO CONNECT CABLES

HOW TO CONNECT THE SPEAKER CABLE

Remove the vinyl cover of the speaker cable and twist the tip of the wire.

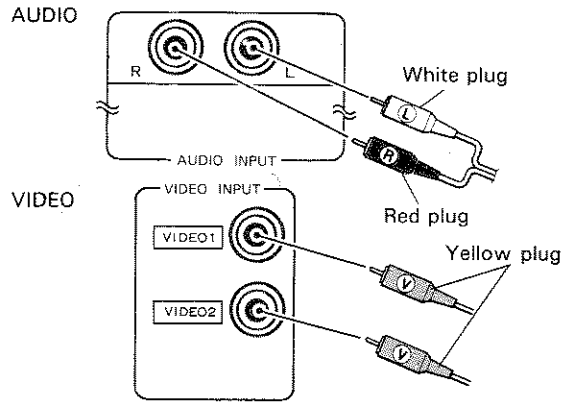


① Depress the clamp.
② Insert the wire into the hole.
③ Release the clamp to fix the wire.

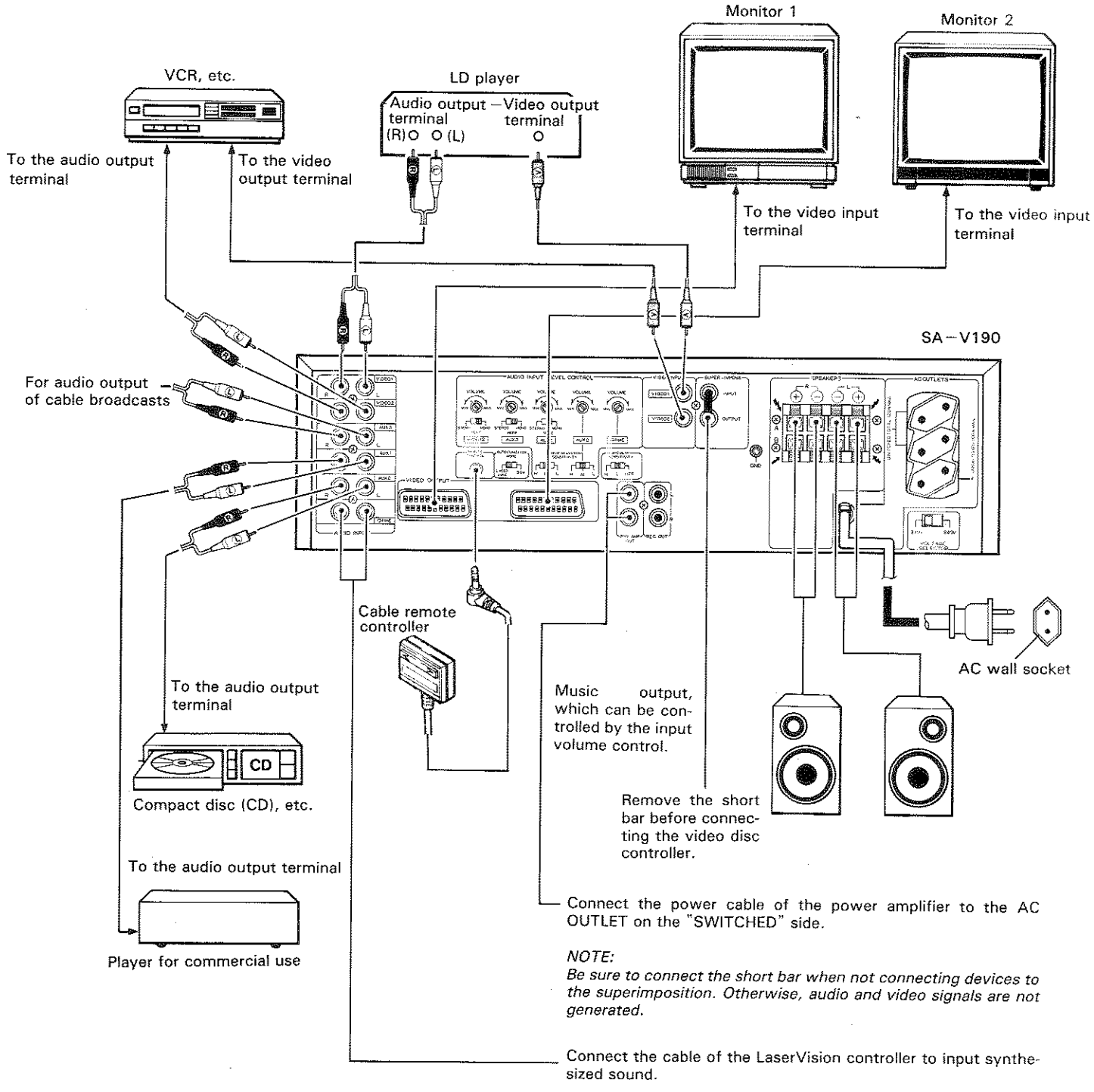
CAUTION:
Check that excessive wires reaching out of the terminal do not touch the other wire. Contact of the wires may cause defects in the device.

HOW TO CONNECT THE AUDIO AND VIDEO CABLE

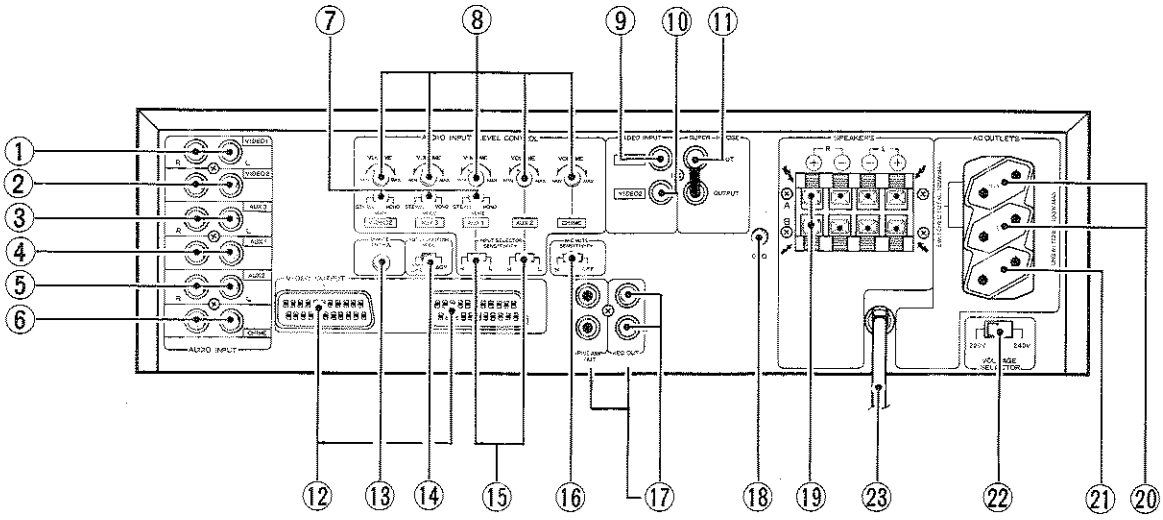
AUDIO:
Connect the white plug to terminal [L] and the red plug to terminal [R]. Be sure to fully insert the plugs.
VIDEO:
Connect the yellow plug to VIDEO 1 or VIDEO 2 input terminal. Be sure to fully insert the plugs.
(For TV set connection, see page 10)



CONNECTION DIAGRAM


Monitor 1
Monitor 2
VCR, etc.
LD player
Audio output terminal (R) (L)
Video output terminal
To the audio output terminal
To the video output terminal
To the video input terminal
To the video input terminal
SA–V190
For audio output of cable broadcasts
Cable remote controller
AC wall socket
To the audio output terminal
CD
Compact disc (CD), etc.
Music output, which can be controlled by the input volume control.
Remove the short bar before connecting the video disc controller.
To the audio output terminal
Player for commercial use
Connect the power cable of the power amplifier to the AC OUTLET on the "SWITCHED" side.
NOTE:
Be sure to connect the short bar when not connecting devices to the superimposition. Otherwise, audio and video signals are not generated.
Connect the cable of the LaserVision controller to input synthesized sound.

REAR PANEL FACILITIES



[AUDIO INPUT] ①~⑥

① VIDEO 1 Terminals

Connects the pin-plug audio cable for audio output of the LD player.

② VIDEO 2 Terminals

Connects the pin-plug audio cable for audio output of the video device, such as a VCR. For monoral sound output, connect the cable to either terminal right (R) or left (L).

③ AUX 3 Terminals

Connects the pin-plug cable for audio output of cable broadcasts, etc. For monoral audio output, connect the cable to either terminal right (R) or left (L).

④ AUX 1 Terminals

Connects the pin-plug cable for audio output of the compact disc player whereby commercials and special announcements are broadcast. For monoral audio output, connect the cable to either terminal right (R) or left (L).

⑤ AUX 2 Terminals

The audio input from this terminal can have priority over other audio input by using the automatic input switch (AUTO FUNCTION) on the front panel. This terminal connects the pin-plug cable for sound output of the compact disc (CD) player.

⑥ CHIME Terminals

Connects the pin-plug cable of the LaserVision controller for audio output of the chime and synthesized sound.

⑦ MODE Switches (STEREO ↔ MONO)

Switches the audio mode (STEREO ↔ MONO) of the devices connected to the VIDEO 2, AUX 3 and AUX 1 terminals. For monoral sound devices, connect the cable to either terminal right (R) or left (L), and set the MODE switch to MONO.

⑧ AUDIO INPUT LEVEL Controls

Adjust the input audio volume level of the VIDEO 2, AUX 1, AUX 2, AUX 3 and CHIME terminals using the respective controls. These controls are normally adjusted to the mark (except the CHIME position) the position, which is placed slightly to the left of the center, the same level as the VIDEO 1. The chime control is set at the position of the minimum volume when it is shipped. If necessary, adjust the chime control with the volume of the VIDEO 1 terminal.

NOTE:
The chime sound volume can be adjusted by using the sound input control only. Return the chime sound input control to the minimum position, and gradually rotate the control for the desired volume.

[VIDEO INPUT OUTPUT]

⑨ VIDEO 1 INPUT Terminal

Connects the pin-plug coaxial cable for video signals transmitted from the LD player.

⑩ VIDEO 2 INPUT Terminal

Connects the pin-plug coaxial cable for video signals transmitted from a video device such as a video cassette recorder (VCR).

⑪ SUPERIMPOSE INPUT/OUTPUT Terminals

Connects the pin-plug cable to synthesize characters with video output by using the LaserVision controller. Otherwise, the input and output terminals are connected by the short bar.

⑫ VIDEO OUTPUT 1,2 Terminals

Connects a maximum of two sets of monitors using the skirt plug video cable.

⑬ REMOTE CONTROL Terminal

Connects the cable of the attached volume remote controller.

The video system has input/output terminals for "VIDEO" and "AUDIO" signals. When the AUDIO OUTPUT terminal is connected to the AUDIO INPUT VIDEO 1 terminal, connect the VIDEO OUTPUT terminal to the VIDEO INPUT VIDEO 1 terminal.

⑭ AUTO FUNCTION MODE Switch

Switches the automatic changeover AUTO FUNCTION (LASER JUKE ↔ BGV) of the devices connected to the input terminal. For more information on the priority, see section AUTO FUNCTION on page 8.

⑮ INPUT SELECTOR SENSITIVITY Switches

Switches the automatic changeover detection sensitivity of the devices connected to the AUDIO INPUT terminal.

1. **AUX 1 Switch**
   - **H:** Set the switch to this position if the function accidentally changes from AUX 1 to AUX 2 (LASER JUKE) or VIDEO 1 (BGV) during playback.
   - **M:** Set the switch to this position for normal usage.
   - **L:** Set the switch to this position if the function accidentally does not change from AUX 1 to AUX 2 or VIDEO 1 upon completion of playback.
2. **AUX 2 Switch**
   - **H:** Set the switch to this position if the function accidentally changes from AUX 2 to AUX 3 during playback.
   - **M:** Set the switch to this position for normal usage.
   - **L:** Set the switch to this position if the function accidentally does not change from AUX 2 to AUX 3 upon completion of playback.

⑯ MIC MUTE SENSITIVITY Switch

When announcing with a microphone, the announcing voice mutes the other sound output. This switch changes the sensitivity of this muting operation.

The muting function is inoperative for the chime.

- **H:** Generally set the switch to this position.
- **L:** Set the switch to this position when announcing to an audience at a noisy location.
- **OFF:** Set the switch for non-muting.

When announcing, adjust the voice volume using the microphone control on the front panel.

⑰ PRE AMP OUT/REC OUT terminals

Used for connecting another pre-amplifier and power amplifier.

REC OUT: Output terminal for music (VIDEO1, VIDEO2, AUX1, AUX2, and AUX3). Volume can be controlled by the input volume control.

⑱ GND Terminal

Connection with peripheral devices for commercial use may cause grounding to be interrupted, resulting in an electric shock. To prevent electric shock and jamming noise, be sure to connect the ground terminal to the ground.

⑲ SPEAKERS Terminals

Connect the left speaker, placed on the left side of the listener, to the terminal L, and the right speaker, placed on the right side of the listener, to the terminal R. Be sure to connect the wire to the terminal with the same polarity: ⊕ to ⊕, ⊖ to ⊖. Combination of the different polarities generates unpleasant sounds.

- When using either speaker terminal system A or B, use speakers with an impedance of 4 ohm to 16 ohm. When using both systems A and B, use speakers with an impedance of 6 ohm to 32 ohm.

⑳ AC OUTLETS (SWITCHED)

Power supplied through these outlets is turned on and off by the amplifier POWER switch. The total electrical power consumption of connected equipment should not exceed 120 W.

㉑ AC OUTLET (UNSWITCHED)

Power flows continually to this outlet, regardless of whether the amplifier is switched ON or OFF. Electrical power consumption of connected equipment should not exceed 100 W. The equipment should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g. when on vacation.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons or television sets to the AC OUTLETS in order to avoid overheating or fire risk.
Improver connections can cause the amplifier to malfunction.

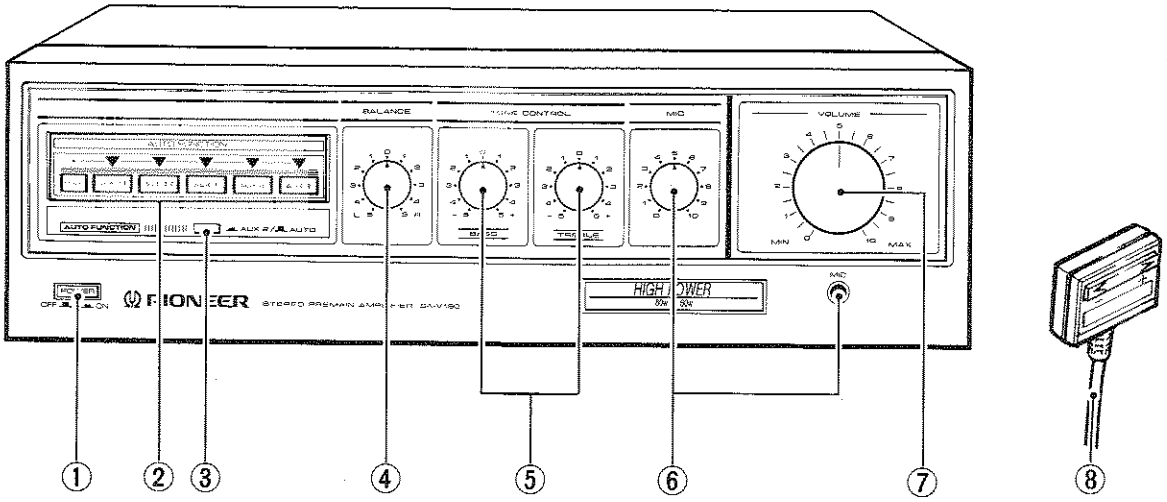
㉒ VOLTAGE SELECTOR

Set the line VOLTAGE SELECTOR according to the supply voltage applied in your area.
(For details, see page 2.)

㉓ Power Cord

Insert the power cord into a wall outlet. Make sure the power switch is OFF.

FRONT PANEL FACILITIES



① Power Switch (▬ ON, ▀ OFF) (POWER)

Press this switch (▬ ON) to turn the SA–V190 power on. Press the switch again (▀ OFF) to turn the power off.

② Automatic Input Changeover Indicator (AUTO FUNCTION)

The SA–V190 automatically switches, according to the priority, the functions between the video devices, such as a LD player and a video cassete recorder connected to the VIDEO (1 and 2) terminals, and the audio input from cable broadcasts and audio devices connected to the AUX 3, AUX 1 and AUX 2 terminals. These indicators indicate the terminal of the input device which has been selected according to the automatic changeover. For more information on the priority, see section AUTO FUNCTION on page 8.

③ Automatic Input Switch (▬ AUX 2, ▀ AUTO) (AUTO FUNCTION)

Press this switch (▬ AUX 2) to force the sound input of the AUX 2 terminal. Press the switch again (▀ AUTO) for automatic input changeover. When the switch is set to AUX 2, video is selected according to the priority of the automatic input changeover of the video (1 and 2) terminals.

④ Balance Control (BALANCE)

Adjusts the sound balance of the right and left speakers.

⑤ Tone Control (TONE CONTROL)

Adjusts the tones, a low tone (BASS) and a high tone (TREBLE), of the device connected to the AUDIO INPUT terminal (VIDEO 1 to 2, AUX 3 to AUX 1) on the rear panel.

⑥ Microphone Jack and Microphone Control (MIC)

Adjusts the volume of the connected microphone. The output signal from the microphone is mixed with other sound signals.

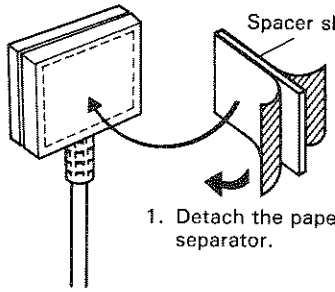
⑦ Volume Control (VOLUME)

Adjusts the volume of the device connected to the AUDIO INPUT terminal (VIDEO 1 to 2, AUX 3 to AUX 1) on the rear panel.

⑧ Volume Remote Controller with Cable (Cable Remote Controller)

Connect the plug of the cable remote controller to the REMOTE CONTROL terminal on the rear panel, so that the volume can be controlled with the remote controller. Hold the remote controller in the hand so that the side without the cable will face the SA–V190. Press the right portion of the remote control switch to increase the volume, and press the left portion of the remote control switch to decrease the volume. Place the remote controller at a convenient location using the attached spacer sheet for uncomplicated operation.

2. Attach to the back of the volume remote controller.



3. Detach the paper separator from the spacer sheet and attach to a desired place.

AUTO FUNCTION

AUTO FUNCTION OPERATION

Automatically changes the input sources, such as video devices and cable broadcasts, according to the priority. Change the AUTO FUNCTION MODE switch on the rear panel when the video and AUX input terminals receive the sound input signals, so that the input sources will automatically change according to the following two priorities:

LASER JUKE

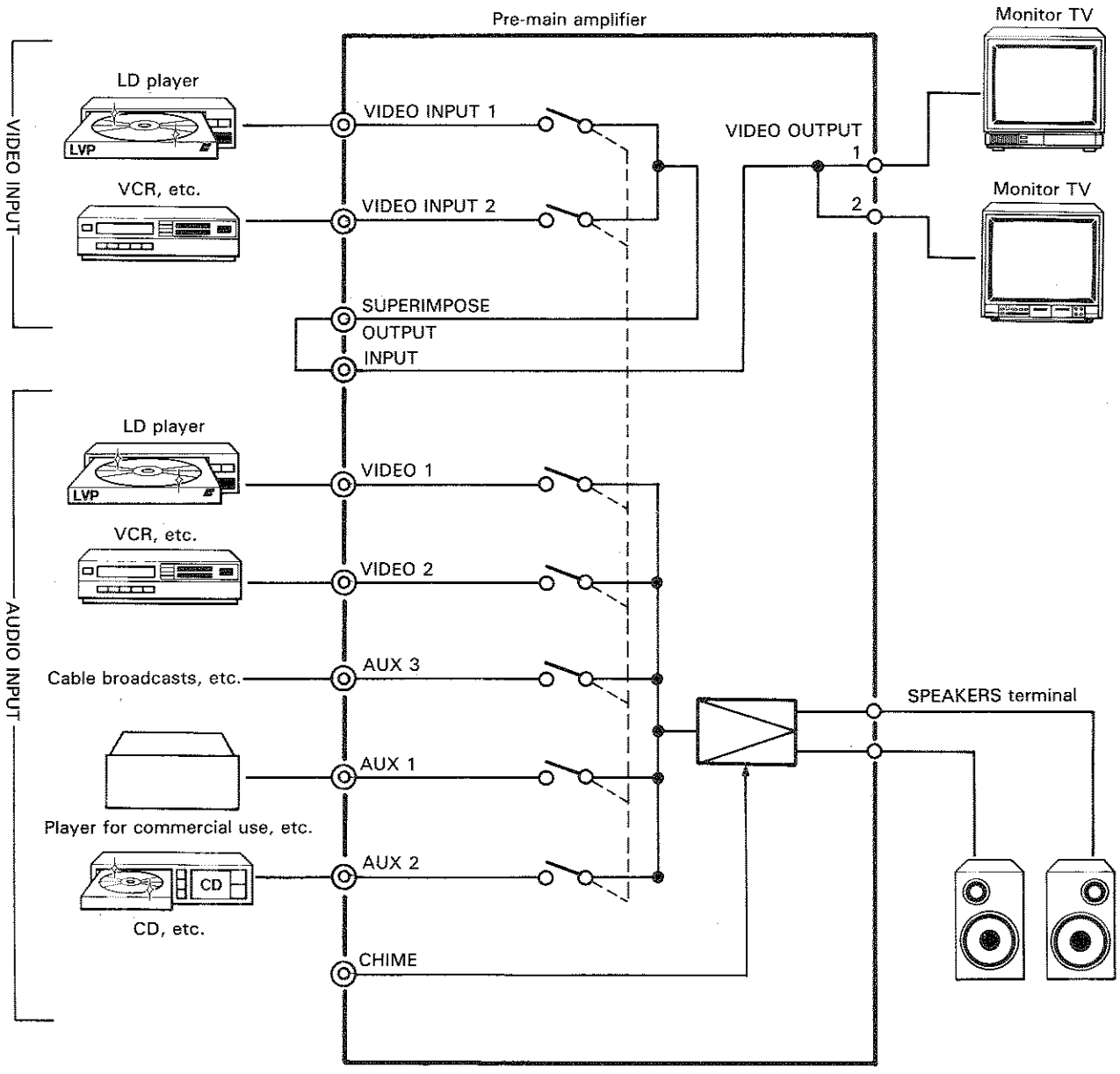
① VIDEO 1 (LD player) → ② VIDEO 2 (VCR) → ③ AUX 1 → ④ AUX 2 (tape recorder or CD) → ⑤ AUX 3 (Cable broadcasts)

BGV (Back Ground Video)

① AUX 1 → ② VIDEO 1 → ③ VIDEO 2 → ④ AUX 2 → ⑤ AUX 3
Use the INPUT SELECTOR SENSITIVITY switch on the rear panel to set the detection level of the sound signals which are input to the terminals AUX 1 and AUX 2 (see page 5).

WITHOUT INPUT SIGNALS

When the VIDEO (audio and video) and AUX terminals receive no input signals, AUX 3 (cable broadcasts) is automatically selected. Note that the AUX terminal (1 to 2) is automatically selected when video signals are not input to the VIDEO 1 or 2 terminal, even if the audio signals are input to the VIDEO 1 or 2 terminal.



MICROPHONE MIXING FUNCTION

Generating sounds by mixing a sound (signal) and another one is generally called mixing. For example, mixing the sounds from a microphone and those from a tape recorder and a CD player, with an adequate ratio, is called mixing. Karaoke (singing alone), singing with recorded instrumental music, is a typical example of microphone mixing.

MICROPHONE MUTING AND FADE-IN

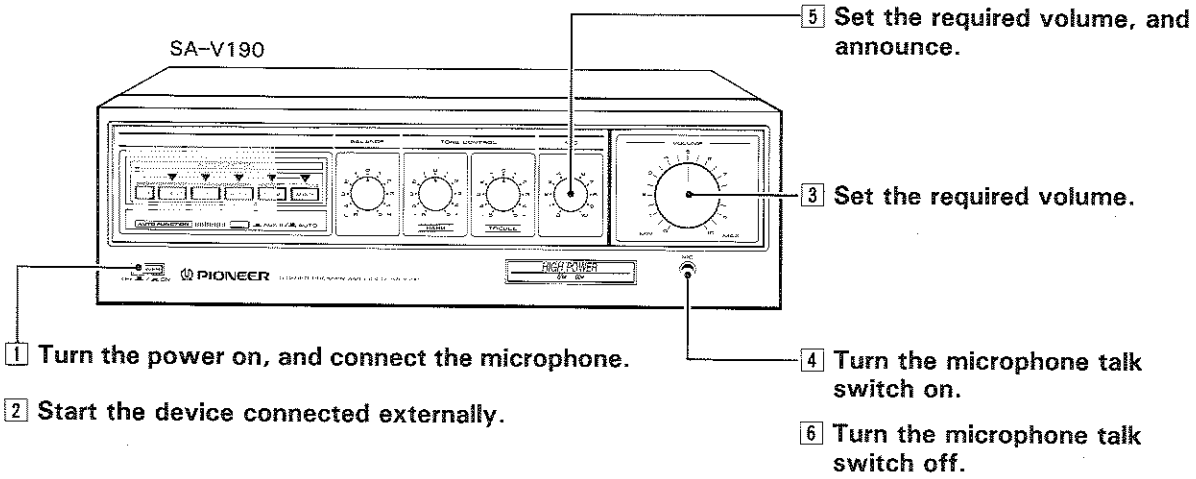
When announcing via a microphone, the sound signal, such as music, which has been output, is automatically reduced (muting). Consequently, the announced voice becomes easy to listen to. Upon completion of the announcement, the sound signal, which has been reduced, gradually increases (fade-in), resulting in the previous volume.

NOTE:

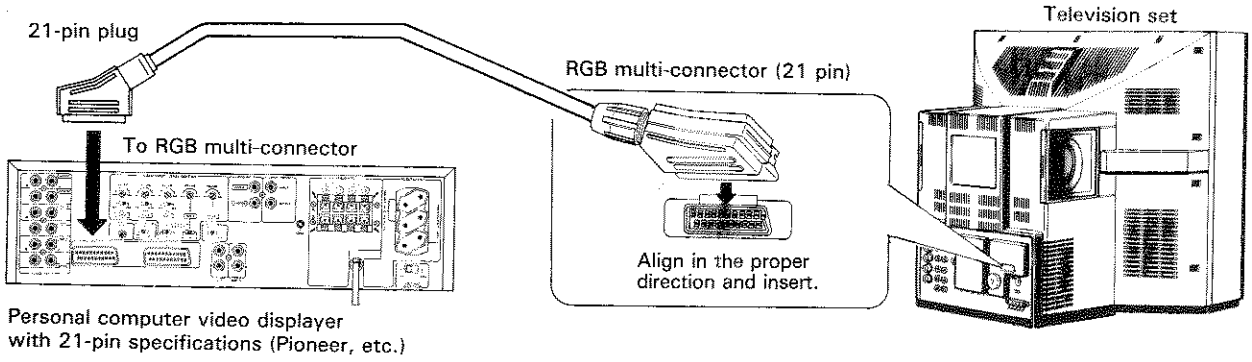
- *Use a microphone with the talk switch.*
- *As the microphone muting is operated regardless of the microphone control position, ambient sounds may unexpectedly cause muting even if the microphone control is set to minimum.*
  Upon completion of announcing, be sure to turn the microphone talk switch off.

Operation Procedure

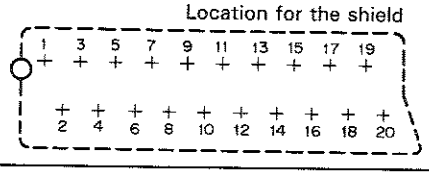
1. Turn the power switches of the SA–V190 and another device, such as a LD player, on. Set the microphone control to minimum when connecting a microphone.
2. Start the music device, such as a LD player, to play.
3. Adjust the volume control (VOLUME) for the required volume. At this time, adjust the balance control (BALANCE) and the tone control (TONE CONTROL) also.
4. Turn the microphone talk switch on.
5. Make an announcement facing the microphone. The announcing voice is mixed with the sound signal transmitted from the music device. Generally, set the microphone control to position 2 or 3. Change the microphone muting sensitivity prior to the announcement.
6. Upon completion of the announcement, turn the microphone talk switch off.


SA–V190
PIONEER
5 Set the required volume, and announce.
3 Set the required volume.
1 Turn the power on, and connect the microphone.
2 Start the device connected externally.
4 Turn the microphone talk switch on.
6 Turn the microphone talk switch off.

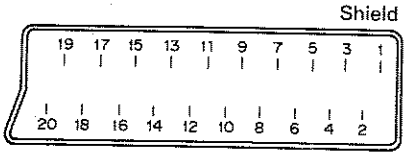
USING THE EUROCONNECTOR


21-pin plug
To RGB multi-connector
RGB multi-connector (21 pin)
Align in the proper direction and insert.
Television set
Personal computer video displayer with 21-pin specifications (Pioneer, etc.)

Female EUROCONNECTOR socket. (Seen from the wiring side)



Female EUROCONNECTOR plug. (Seen from the wiring side)



The socket features 2 rows of 10 contacts in a special arrangement which accept the male blade contacts.
The 21st contact is made by the metal shield of the plug.

THE CONNECTIONS

The full EUROCONNECTOR specification consists of the following connections:

1	———	———
2	———	———
3	———	———
4	———	———
5	———	———
6	———	———
7	———	———
8	———	———
9	———	———
10	———	———
11	———	———
12	———	———
13	———	———
14	———	———
15	———	———
16	———	———
17	CVBS earth	
18	———	———
19	CVBS out	1V/75 Ohm
20	———	———
21	Socket earth	

N.B.
The above is the full EUROCONNECTOR specification.
Each unit of video equipment will be eqvipped with a EUROCONNECTOR with a specification equal or less than the full EUROCONNECTOR listed above.

TROUBLESHOOTING

If you suspect that the system is malfunctioning, check whether the SA–V190 is correctly connected. In addition to actual failure of the SA–V190, incomplete maintenance and wrong operation may cause you to suspect that a failure has occurred. When the system does not recover after the following checks, contact the Pioneer dealer from whom you acquired the SA–V190:

Symptom	Cause	Remedy
No sound from both speakers	1. Power switch is turned off. 2. Power cable is disconnected. 3. Volume control is at the minimum position. 4. Short bar is not connected.	1. Turn the power switch on. 2. Fully insert the power cable into the AC outlet. 3. Adjust the volume control. 4. Connect the short bar.
No sound from one speaker	1. Balance control is fully rotated in either direction. 2. One speaker cable is disconnected.	1. Set the balance control to the center. 2. Fully insert the speaker cable.
Microphone mixing impossible	1. Microphone cable plug is not completely inserted. 2. Microphone is too far from the mouth, or the microphone is misoperated. 3. Microphone control is at "0". 4. Microphone talk switch is turned off.	1. Fully insert the microphone cable plug. 2. Read the microphone instruction manual. 3. Adjust the microphone control. 4. Turn the microphone talk switch on.

SPECIFICATION

Amplifier

Continuous Power Output (both channel driven)
T.H.D. 10%, 1kHz, 6Ω ..... 60W per channel
DIN, Continuous Power Output at 1kHz (both channel driven)
T.H.D. 1%, 1kHz, 6Ω ..... 45W per channel
Total harmonic distortion rate (1kHz 30W, RL=6Ω, AUX IN)
..... 0.3%
Frequency response
Microphone ..... 50Hz–12kHz ($^{+0}_{-3}$dB)
VIDEO1, VIDEO2, AUX1, AUX2, AUX3
..... 20Hz–20kHz ($^{+0}_{-3}$dB)
Input terminal (sensitivity/input impedance)
VIDEO1 ..... 150mV/50kΩ
VIDEO2, AUX1, AUX2, AUX3 ..... 50mV/50kΩ
CHIME 300mV/5kΩ
POWER AMP IN 1V/80kΩ
Audio output terminal
PRE AMP OUT 1V/1kΩ
Tone control characteristics
BASS ..... ±12dB (100Hz)
TREBLE ..... ±10dB (10kHz)
Muting characteristics ..... 15dB (typ)
SPEAKERS terminal: ..... 4 to 16 Ω (System A or B)
6 to 32 Ω (System A and B)

Power Supply, Others

Power requirements ..... ~a.c. 220/240 Volts~, 50/60Hz
(Switchable)
Power consumption 330W
AC OUTLETS: ..... Switched (120W MAX): 2
Unswitched (100W MAX): 1
Dimensions (W x H x D) ..... 420 x 130 x 402 mm
Weight ..... 9.5 kg

Accessories

Operating Instructions 1
Spacer sheet 1
Volume remote controller with cable 1

- *Specifications and design are subject to possible change without notice, due to improvements.*